

February 17, 1978

PRN-LI-78-48

Mr. James P. O'Reilly, Director, Region II
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
230 Peachtree Street, N. W., Suite 1217
Atlanta, Georgia 30303

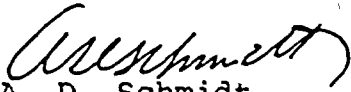
Dear Mr. O'Reilly:

REPORTABLE OCCURRENCE 335-78-7
ST. LUCIE UNIT 1
DATE OF OCCURRENCE: FEBRUARY 3, 1978

TECHNICAL SPECIFICATION 4.3.1.1.3
RTD RESPONSE TIME

The attached Licensee Event Report is being submitted in accordance with Technical Specification 6.9 to provide prompt notification of the subject occurrence.

Very truly yours,


A. D. Schmidt
Vice President
Power Resources

MAS/bab

Attachment

cc: Robert Lowenstein, Esquire
Director, Office of Inspection and Enforcement (40)
Director, Office of Management Information and
Program Control (3)

AO 4
GD

LICENSEE NAME 01 F L S L S 1 14														LICENSE NUMBER 15 0 0 - 0 0 0 0 0 0 - 0 0 25										LICENSE TYPE 26 4 1 1 1 1 30					EVENT TYPE 31 0 1 32	
--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	---	--	--	--	--	-------------------------------	--

CATEGORY 01 CONT 57 58		REPORT TYPE 59 T 60	REPORT SOURCE 60 L 61	DOCKET NUMBER 61 0 5 0 - 0 3 3 5 68					EVENT DATE 69 0 2 0 3 7 8 74				REPORT DATE 75 0 2 1 7 7 8 80			
---------------------------------	--	----------------------------	------------------------------	--	--	--	--	--	---	--	--	--	--	--	--	--

EVENT DESCRIPTION

2 | Technical Specification Table 3.3-2(Reactor Protective Instrumentation Response Times) | 20
 3 | does not include allowance for resistance temperature detector (RTD) response time, | 50
 4 | thereby preventing full compliance with Technical Specification 4.3.1.1.3 (response time | 80
 5 | testing). In addition, the RTD response times of selected channels are apparently greater | 80
 6 | than the 5-second value initially used by the NSSS vendor in the applicable setpoint | 80

SYSTEM CODE 07 I A 8 9 10		CAUSE CODE 11 B 12	COMPONENT CODE 12 I N S T R U 17					PRIME COMPONENT SUPPLIER 43 N 44	COMPONENT MANUFACTURER 44 R 3 7 0 47			VOLATION 48 N 49
--	--	---------------------------	---	--	--	--	--	---	---	--	--	-------------------------

CAUSE DESCRIPTION

7 | The RTDs are mounted in instrument wells. Apparently, changes in the parameters | 20
 8 | governing the response of an RTD in an instrument well affect the overall response time. | 50
 9 | In addition, St. Lucie Unit 1 and other similar plants have had difficulty verifying the | 80

FACILITY STATUS 01 E 8 9	% POWER 10 0 9 4 12	OTHER STATUS 13 NA 14	METHOD OF DISCOVERY 44 d 45	DISCOVERY DESCRIPTION 46 NA 47
-----------------------------------	--------------------------------	------------------------------	------------------------------------	---------------------------------------

FORM OF ACTIVITY RELEASED 02 Z 8 9	CONTENT OF RELEASE 10 Z 11	AMOUNT OF ACTIVITY 12 NA 13	LOCATION OF RELEASE 44 NA 45
---	-----------------------------------	------------------------------------	-------------------------------------

PERSONNEL EXPOSURES

NUMBER 03 0 0 0 8 9 10 11	TYPE 12 Z 13	DESCRIPTION 14 NA 15
--	---------------------	-----------------------------

PERSONNEL INJURIES

NUMBER 04 0 0 0 8 9 10 11	DESCRIPTION 12 NA 13
--	-----------------------------

PROBABLE CONSEQUENCES

05 NA 80

LOSS OR DAMAGE TO FACILITY

TYPE 06 Z 8 9	DESCRIPTION 10 NA 11
------------------------	-----------------------------

PUBLICITY

07 NA 80

ADDITIONAL FACTORS

08 | See page two for continuation of Event Description and Cause Description. | 80

09 80

Event Description (continued)

analysis. This is based on measurements made by a consultant in mid-January, 1978. The consultant reported the results on February 3, 1978. Although the measured response times are greater than 5 seconds, they are less than the revised value of 8 seconds contained in a proposed Technical Specification amendment which has been submitted to the NRC (see "Cause Description"). This is the first occurrence of this type at St. Lucie Unit 1. (335-78-7)

Cause Description (continued)

5-second response time assumed in the NSSS setpoint analysis. As a result of the parametric uncertainties and the measurement difficulties, the NSSS vendor had been requested in 1977 to re-evaluate the appropriate setpoints using a response time greater than 5 seconds. In December, 1977 the NSSS vendor responded with an evaluation that supported response times of up to 8 seconds. A proposal to incorporate the 8-second value in Table 3.3-2 was forwarded to the NRC by letter L-78-39 dated February 2, 1978.

All RTDs tested had response times less than 8 seconds, so no further action beyond the Technical Specification change proposal is planned at this time.